Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554 FINERAL COMMUNICATIONS COMMISSION,

In the Matter of

Establishment of an Improved Model for Predicting the Broadcast Television Field Strength Received at **Individual Locations**

ET Docket No. 00-11

OFFICE OF THE SECRETARY

To the Commission:

PETITION FOR RECONSIDERATION

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SUMMARY

EchoStar Satellite Corporation ("EchoStar") petitions the Commission to reconsider those portions of its *First Report and Order* in ET Docket No. 00-11 that fail to comply with Congress' mandate to "ensure" that the point-to-point predictive model for reliably and presumptively determining the ability of individual households to receive an over-the-air television broadcast signal "takes into account terrain, building structures, and other land cover variations."

In response to Congress's directive under the Satellite Home Viewer

Improvement Act of 1999 ("SHVIA"), the Commission proposed specific refinements to the

Individual Location Longley-Rice ("ILLR") predictive model, including clutter loss values

derived from the Land Use Land Cover ("LULC") variables found in the United States

Department of the Interior Geological Survey ("USGS") database, and the recently published

work of Thomas N. Rubinstein. EchoStar, DirecTV and other commenters supported this
approach along with the proposed values for clutter loss. In the *First Report and Order*,

however, the Commission essentially reversed course by setting the clutter loss values for all

VHF channels to zero and substantially reducing the clutter loss values for all UHF channels.

The courts have held that a federal agency cannot avoid compliance with a statutory mandate by

merely "considering" prescribed factors rather than including them in the final regulatory model.

This error is compounded by the Commission's unjustified reliance on a single study promoted by the broadcast interests that was never placed in the record in this proceeding or otherwise publicized in a respected engineering journal. The unavailability of these data violates the Administrative Procedure Act ("APA"), effectively negates a clear direction from

Congress, and warrants setting aside the Commission' so-called "middle ground" approach as the basis for its decision.

Lastly, the Commission failed to address EchoStar's recommendation to clarify that measurements by qualified testers are allowed prior to the subscriber requesting a waiver from the local network station. Allowing tests prior to this waiver stage would provide a far more efficient approach to resolving the question of a subscriber's eligibility for distance network service. EchoStar urges the Commission to address this issue on reconsideration of the *First Report and Order*.

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for Predicting the Broadcast Television)	
Field Strength Received at)	
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)	

To the Commission:

PETITION FOR RECONSIDERATION

Pursuant to Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, EchoStar Satellite Corporation ("EchoStar") hereby petitions the Commission to reconsider those portions of its *First Report and Order* in the above-captioned proceeding, which fail to comply with the Congressional mandate to "ensure" that the point-to-point predictive model for reliably and presumptively determining the ability of individual households to receive an over-the-air television broadcast signal "takes into account terrain, building structures, and other land cover variations." The Commission inextricably and impermissibly relied upon a study promoted by

In the Matter of Establishment of an Improved Model for Predicting the Broadcast Television Field Strength Received at Individual Locations, ET Docket No. 00-11, First Report and Order, 65 Fed. Reg. 36,639 (June 9, 2000) ("First Report and Order").

See Satellite Home Viewer Improvement Act of 1999 ("SHVIA"), Title 1 of the Intellectual Property and Communications Omnibus Reform Act of 1999, P.L. 106-113, 113 Stat. 1501, Appendix I (1999) (relating to copyright licensing and carriage of broadcast signals by (Continued ...)

broadcast interests that was never placed in the record of this proceeding to reach a so-called "middle ground." By relying upon this extra-record study to support its conclusions, the Commission has violated the Administrative Procedure Act ("APA"), and, more important, effectively negated a clear direction from Congress.

In SHVIA, Congress instructed the Commission to rely on the Individual Location Longley-Rice ("ILLR") model developed in Docket No. 98-201,⁴ and to "ensure that the model takes into account terrain, building structures, and other land cover variations." Indeed, the legislative history of SHVIA confirms that Congress specifically intended that the Commission improve the ILLR model's accuracy by including such clutter losses which to date have not been part of this predictive model.

In furtherance of this Congressional directive, the Commission proposed in this proceeding specific refinements to the ILLR predictive model including clutter loss values

satellite carriers). The Commission commenced this proceeding in response to the requirements set forth in SHVIA. The signal intensity for determining eligibility is the Grade B standard set forth in 47 C.F.R. § 73.683(a).

³ First Report and Order at ¶ 12.

See Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act Part 73 Definition and Measurement of Signals of Grade B Intensity, Report and Order ("SHVA Report and Order"), CS Docket No. 98-201, 14 FCC Rcd. 2654 (1999), recon. granted in part and denied in part, Order on Reconsideration, FCC 99-278 (rel. Oct. 7, 1999) ("SHVA Order on Reconsideration").

See SHVIA, Title I, Section 1008, "Rules for Satellite Carriers Retransmitting Television Broadcast Signals," to be codified at 47 U.S.C. § 339(c)(3). See also Section 1005 of the SHVIA, which requires: "In determining presumptively whether a person resides in an unserved household . . . a court shall rely on the Individual Location Longley-Rice model as set forth by the Federal Communications Commission in Docket No. 98-201, as that model may be amended by the Commission over time under section 339(c)(3) of the Communications Act of 1934 to increase the accuracy of that model."

derived from the Land Use Land Cover ("LULC") variables found in the United States

Department of the Interior Geological Survey ("USGS") database, and the recently published work of Thomas N. Rubinstein. EchoStar, DirecTV and other commenters supported this approach along with the proposed values for clutter loss. In the *First Report and Order*, however, the Commission essentially reversed course by setting the clutter loss values for all VHF channels to zero and substantially reducing the clutter loss values for all UHF channels. The courts have held that a federal agency cannot avoid compliance with a statutory mandate by merely "considering" prescribed factors rather than including them into the final regulatory model.

This error has been compounded by the Commission's unjustified reliance upon a single study promoted by broadcast interests that was never placed in the record in this proceeding or otherwise publicized in a respected engineering journal.¹⁰ As a result, parties to this proceeding have been unable to examine and independently assess, methodologically or statistically, the information upon which the Commission summarily based its decision with

See Thomas N. Rubinstein, "Clutter Losses and Environmental Noise Characteristics Associated with Various LULC Categories," IEEE Transactions on Broadcasting, Vol. 44, No. 3, September 1998.

Comments of EchoStar at 3, Comments of DirecTV at 4-5, Comments of the SBCA at 3.

First Report and Order at ¶¶ 13-15.

See, e.g., Colorado v. United States Department of the Interior, 880 F.2d 481, 483 (D.C. Cir. 1989) (requiring the agency to incorporate prescribed fators into a similar model).

First Report and Order at ¶ 13; Comments of the Association for Maximum Service Television, Inc. and the National Association of Broadcasters ("NAB/AMSTV").

regard to clutter loss values. In view of the essential relation between clutter losses and the fulfillment of the Commission's mandate under SHVIA to take into account terrain, building structures, and other land cover variations in refining the ILLR predictive model, the unavailability of these data constitutes prejudice which, in and of itself, warrants setting aside the Commission's so-called "middle ground" approach. Based upon the record before it, the Commission should have adopted its original proposal to use the clutter loss values for both UHF and VHF channels developed from the Rubinstein study.

Lastly, the Commission failed to address EchoStar's recommendation to clarify that measurements by qualified testers are allowed prior to the subscriber requesting a waiver from the local network station. ¹² Under Section 1008 of the SHVIA, a subscriber who is initially denied the retransmission of a signal of a distant network station based on the predictive model may request a waiver by submitting a request through the subscriber's satellite carrier to the local network station. If the broadcaster denies the request, the statute provides for measurement by a qualified and independent person at the subscriber's request, subject to a "loser pays" requirement. Allowing tests prior to this waiver stage would provide a far more efficient approach to resolving the question of a subscriber's eligibility for distance network service. EchoStar urges the Commission to address this issue on reconsideration of the *First Report and Order*.

See 5 U.S.C. § 553; see also Home Box Office, Inc. v. Federal Communications Commission, 567 F.2d 9 (1976).

¹² Comments of EchoStar at 8; Reply Comments of EchoStar at 10-11.

I. THE COMMISSION HAS ABDICATED ITS RESPONSIBILITY UNDER SHVIA TO INCLUDE CLUTTER LOSS VALUES IN THE ILLR PREDICTIVE MODEL FOR ALL BROADCAST CHANNELS

In SHVIA, Congress specifically instructed the Commission to "ensure that the [ILLR] model takes into account terrain, building structures, and other land cover variations." The Conference Report in the legislative history of SHVIA further states that the this provision "requires" the Commission to take into account not only terrain, as the ILLR model does now, but also land cover variations such as buildings and vegetation. Despite these clear directives from Congress, the Commission abdicated its responsibility by first agreeing to assign clutter loss values based on a finding that their use "would enhance the accuracy of predictions made with the ILLR model," but then establishing all VHF clutter loss values at zero and arbitrarily reducing UHF clutter loss values by approximately two-thirds on the misguided belief that these values would make the ILLR model more accurate. Such findings are not only internally inconsistent, but are contrary to the specific instructions of Congress to the Commission to include terrain, building structures and other land cover variations in the predictive model.

In general, courts have held that an agency exceeds its statutory authority when it adopts rules or makes findings that are inconsistent with a specific statutory mandate.¹⁷ In an

See SHVIA, supra (emphasis added).

H.R. Conf. Rep. No. 106-464, at 12 (Nov. 9, 1999).

¹⁵ First Report and Order, at ¶ 10.

¹⁶ Id. at ¶¶ 14-15.

Where an agency is applying a statute entrusted by Congress to its administration, the court "must give effect to the unambiguously expressed intent of Congress." *Chevron* (Continued ...)

analogous context, a federal department's model for estimating environmental damage was invalidated because it failed to utilize two of the three factors that Congress required the agency to consider. In that case, Congress, through the President, had mandated that the Department of the Interior ("DOI") promulgates regulations to implement a simplified estimation model to assess environmental damage caused by the release of oil or a hazardous substance. Among other things, the statute required that this model "shall take into consideration factors including, but not limited to, replacement value, use value, and ability of the ecosystem or resource to recover."

U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842-44, 104 S.Ct. 2778 (1984). More recently, the Court confirmed that "an agency's interpretation of a statute is not entitled to deference when it goes beyond the meaning that the statute can bear" MCI Telecommunications Corp. v. AT&T, 512 U.S. 218, 229, 114 S.Ct. 2223, 2231 (1994) (overturning rule change that contradicted statutory language in spite of the Commission's rational that the change furthers the overarching goal of the statute) (citing Pittston Coal Group v. Sebben, 488 U.S. 105, 113, 109 S.Ct. 414, 419-20 (1988); Chevron, 467 U.S. at 842-43, 104 S.Ct. at 2781-82). "If a court, employing traditional tools of statutory construction, ascertains that Congress had an intention on the precise question at issue, that intention is the law and must be given effect." I.N.S. v. Cardoza-Fonseca, 480 U.S. 421, 448, 107 S.Ct. 1207, 1221, 94 L.Ed.2d 434 (1987) (citations omitted). See also Southwestern Bell Corporation, et al., v. Federal Communications Commission and United States of America, 43 F.2d 1515, 1519 (1995) ("The Commission may not . . . ignore congressional directives").

Colorado v. United States Department of the Interior, 880 F.2d 481, 483 (D.C. Cir. 1989) ("Colorado") (construing Section 301(c) of the Comprehensive Environmental Response Compensation, and Liability Act of 1980 ("CERCLA"), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), Pub.L. No. 99-499, 100 Stat. 1630 (1986), codified in 47 U.S.C. § 9651(c)).

Id. (emphasis added).

After an extensive rulemaking, ²⁰ DOI adopted a model that utilized use values, but did not account for replacement values or the ability of the ecosystem or resource to recover. ²¹ The court in *Colorado* found the model promulgated by the DOI unacceptable, stating that it "may not be based exclusively on lost use values to measure natural resource damages." ²² For its part, DOI had stated that the "[u]se values were used rather than restoration or replacement costs because adequate data were not available to create a standardized model based on average values for restoration costs." ²³ DOI further argued that the computer model values marine mammals such as whales, dolphins, and sea otters at *zero*, because "information on toxicity from oil, and especially hazardous substances, to marine mammals is relatively scarce." ²⁴ The court rejected DOI's rationalizations, stating that "[a]lthough data limitations undoubtedly exist, such limitations cannot justify DOI's decision to ignore the clear mandate of Congress" ²⁵

Similarly, in SHVIA Congress insisted that the Commission "ensure that the model takes into account terrain, building structures, and other land cover variations." The

The rulemaking period lasted more than five years and consisted of numerous public notices and comments. *Colorado*, 880 F.2d at 484.

²¹ Colorado, 880 F.2d 481 at 490-91.

²² *Id*.

²³ *Id.* (citing 52 Fed. Reg. 9051 (1987)).

²⁴ *Id.* (citing 52 Fed. Reg. 9085).

²⁵ *Id.* at 491.

²⁶ SHVIA, at 47 U.S.C. § 339(c)(3) (emphasis added).

Commission in this proceeding cannot now ignore the clear mandate of Congress by normalizing the VHF clutter losses to zero because it feels compelled to take a "middle ground" when faced with conflicting positions or simply because it considers better values "relatively scarce."²⁷

Nor can the Commission avoid a clear statutory mandate by "considering" the prescribed factors in the rulemaking process but not incorporating them into the regulatory model. In *Colorado*, the statute required that the regulations "shall take into consideration" the three pertinent factors. ²⁸ The court rejected DOI's argument that it had complied with the statute by considering, though ultimately rejecting, the use of replacement or restoration values. ²⁹ "Apart from misreading Congress' use of the phrase "shall take into consideration" . . . DOI's formalist argument fail[ed] on its own terms, for section 301(c)(2)(B) expressly provides that the regulations (not DOI) must take into consideration replacement value."

The Commission should have incorporated its proposed clutter loss values into its ILLR predictive model for all VHF and UHF channels. These values were derived from the Rubinstein study published in a respected engineering journal, and supported by EchoStar and DirecTV. SHVIA unequivocally requires such a result so as to "ensure that the model takes into account terrain, building structures and other land cover variations." 47 U.S.C. § 339(c)(3) (emphasis added).

Report and Order at ¶ 12.

²⁸ *Id.* at 491.

²⁹ *Id*.

Comments of EchoStar at 2-5; DirecTV Comments at 4-7.

II. THE COMMISSION HAS FAILED TO COMPLY WITH THE ADMINISTRATIVE PROCEDURE ACT BY BASING ITS DECISION ON MATERIALS NOT CONTAINED IN THE RECORD OF THIS PROCEEDING

The Commission's error in failing to follow a clear directive from Congress to "take into account" clutter loss values in the ILLR predictive model was compounded by its use of extra-record data that are not readily available to support the values it ultimately chose to adopt. In order to develop a so-called "middle ground" position between the views of the broadcast interests and those of the satellite industry, the Commission chose to rely upon an engineering study reported in the Comments of NAB/AMSTV.³¹ The study, however, is not part of NAB/AMSTV's Comments, nor is it included in the engineering attachment to those Comments.³² Indeed, the Commission's records do not contain any portion of the engineering study, the data underlying that study or the statistical methodologies used in their evaluation.³³

The Administrative Procedure Act ("APA") requires that the Commission base its decisions in a rulemaking proceeding only on matters and information contained in the public record.³⁴ As the courts have stated, the public record of a rulemaking proceeding must reflect

Report and Order at ¶ 13, n.14.

NAB/AMSTV Comments at 17, Attached Statement of Jules Cohen, P.E.

In his statement, Mr. Cohen refers to a judicial proceeding in which he asserts that actual measurements were placed in evidence. *See* Jules Cohen Statement, *supra*, at ¶ 11. However, the underlying data and the statistical analyses associated with the data remain unobtainable, despite exceptional efforts, by telephone and professional searches of the court's records and docket sheets.

See 5 U.S.C. § 553(c). See also Monongahela Power Company v. Marsh, 1988 WL 84262, ¶5. (D.D.C.) "By way of brief general background, the public's right to submit meaningful comments on proposed agency action requires the agency to place on the record the (Continued ...)

what representations are made to the agency so that relevant information supporting those representations may be brought to the attention of a reviewing court by persons participating in the proceeding.³⁵ The courts also have held that "in informal rulemaking, at least the most critical factual material that is used to support the agency's position on review must have been made public in the proceeding and exposed to refutation." ³⁶ This is consistent with the recommendations of the Administrative Conference of the United States ("ACUS") which include the following:

[T]he rulemaking staff should anticipate court rejection of "post-hoc rationalizations" for rules and close judicial scrutiny of reliance on data obtained after the public stage of rulemaking. Accordingly, the agency would be well advised, except in unusual circumstances, to include in the public file all materials on which it relies in making final rulemaking decisions and to provide an opportunity for public comment in appropriate circumstances.³⁷

following general categories of materials: 1) the underlying data or evidence reviewed and relied upon by the agency; 2) the methodology used to collect and analyze such data or information; and 3) expert judgments or predictions used by an agency to link its analysis to the ultimate conclusions drawn by the agency. See, e.g., Portland Cement Association v. Ruckelshaus, 486 F.2d 375, 392-95 (D.C. Cir. 1973), cert. denied, 423 U.S. 1025 (1975) ('Portland Cement'); U.S. Lines, Inc. v. Federal Maritime Commission, 584 F. 2d 519, 533 (D.C. Cir. 1978) ('U.S. Lines')." Id. at ¶ 5.

See Home Box Office, Inc. v Federal Communications Commission and United States of America, 567 F.2d 9, 53 (1976).

Association of Data Processing Service Organizations v. Board of Governors, 745 F.2d 677, 684 (D.C. Cir. 1984).

Improving the Environment for Agency Rulemaking, ACUS Recommendation 93-4, 58 Fed. Reg. 4670 (1994) (cited in Jeffrey S. Lubbers, A Guide to Federal Agency Rulemaking), Third Edition, 1998, at 219 (citing American Textile Inst. v. Donovan, 452 U.S. 490, 539 (1981)).

It is plain that the Commission in this proceeding has not acted in a reasonable fashion consistent with the legal standards set forth by the APA and the courts. Its reliance on extra-record materials is especially troubling in light of the Commission's admonition in its *Notice of Proposed Rulemaking* that it would be relying only upon "measurement data [that has] been analyzed and published, or for which we have some confidence in deriving such values." ³⁸

Nothing in the *First Report and Order* or the record of this proceeding, however, even suggests that the Commission has independently evaluated the engineering study reported by the broadcasters, reviewed the data underlying it, or assessed the statistical methodology or validity contained in it. Rather, the Commission chose to rely upon the "middle ground" conclusions of NAB/AMSTV to find that a default value of zero is justified as the VHF clutter loss and significantly reduced values are warranted for UHF clutter loss. This action must be viewed as patently unfair and inconsistent with rational decisionmaking by an administrative body.

III. THE COMMISSION FAILED TO ADDRESS ECHOSTAR'S REQUEST TO CLARIFY THAT RECEPTION TESTS ARE PERMITTED PRIOR TO THE CONCLUSION OF THE LOCAL WAIVER PROCESS

Under Section 1008 of the SHVIA, to be codified as 47 U.S.C. §339(c), a subscriber who is denied the retransmission of a signal of a distant network station based upon the predictive model may request a waiver by submitting a request through the subscriber's

In the Matter of Establishment of an Improved Model for Predicting the Broadcast Television Field Strength Received at Individual Locations, ET Docket No. 00-11, Notice of Proposed Rulemaking, 65 Fed. Reg. 4923 (Feb. 2, 2000) at ¶ 11.

satellite carrier to the local network station.³⁹ If the broadcaster denies the waiver request, the statute provides for measurements by a qualified and independent person at the subscriber's request, subject to a "loser pays" requirement.

In its Comments, EchoStar urged the Commission to clarify that measurements by qualified and independent testers are allowed *prior* to the conclusion of the waiver process. 40 Indeed, in order to provide network retransmission service to a subscriber, the satellite provider must, *ab initio*, assess eligibility using the signal intensity standard in effect under 47 U.S.C. §119(d)(10)(A). To make that assessment in situations in which the model predicts a household is served but, in fact, reception is limited or affected by local propagation anomalies, clutter loss or marginal paths, the satellite provider effectively has two options. *First*, it may choose to deny service based on the model, and wait for the waiver process to conclude before any signal measurements are conducted at the subscriber's request, subject to the loser-pays rule. *Second*, it may immediately order tests to assess eligibility and if at this stage the subscriber is deemed eligible to receive satellite retransmissions of network signals, the subsequent waiver process and its inherent delay will have become moot. 41

As EchoStar further stated in its Comments, there is nothing in the statute that prohibits the satellite provider from ordering such measurements prior to the completion of the waiver process. While the law *prescribes* a measurement if a waiver is denied subject to the

³⁹ 47 U.S.C. § 339(c)(2).

Comments of EchoStar at 8; Reply Comments of EchoStar at 10-11.

If the test indicates an adequate local signal, the subscriber still will be able to go forward with the waiver process, but a second test will likewise have become moot.

"loser pays" rule, it does not *preclude* a measurement prior to the initiation of the waiver process, at the satellite provider's discretion, to determine whether a subscriber is eligible for the distant signal in the first place. Measurement is a fundamental method for determining whether the "unserved household" condition is met, and the law cannot be read as preventing the satellite carrier from ascertaining eligibility in this fashion. By avoiding the initial denial and the waiver process, the satellite provider will have engaged in a far more efficient approach to resolving the question of a subscriber's eligibility for retransmission service. 42

Despite this request for clarification for a more efficient procedure for resolving the question of a subscriber's eligibility for retransmission service, the Commission did not address the matter in its *First Report and Order*. EchoStar urges the Commission to do so on reconsideration.

IV. CONCLUSION

EchoStar requests reconsideration of those portions of the *First Report and Order* that are inconsistent with the mandate of SHVIA to ensure that the ILLR predictive model takes into account terrain, building structures, and other land cover variations, such as the establishment of zero values for VHF clutter losses and substantially reduced values for UHF clutter losses. Moreover, the Commission cannot rely upon any extra-record materials, such as the engineering studies and data reported in the NAB/AMSTV Comments, without first making them available to all parties for their review and comment. Finally, the Commission was remiss

In this regard, EchoStar agrees that testers conducting these measurements should be subject to the same qualification criteria applicable for testing after a waiver denial and that the satellite carrier should pay for the tests irrespective of outcome.

in failing to consider EchoStar's request to clarify that the statute allows for a more efficient procedure to resolve the question of a subscriber's eligibility for retransmission service through pre-waiver testing.

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